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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MACPHERSON KWOK CHEN & HEID LLP 1762 TECHNOLOGY DRIVE, SUITE 226 SAN JOSE, CA 95110			EXAMINER DABNEY, PHYLESHA LARVINIA	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/769,158	Applicant(s) SMITH ET AL.	
	Examiner Phylesha L. Dabney	Art Unit 2646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30,32,33 and 35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30,32,33 and 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to this amendment received 28 June 2005 of which claims 1-35 are pending, and claims 31 and 34 were cancelled.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, “an electric conduit” of claim 20, for communicating sound to the earpiece. must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 14 is objected to because of the following informalities: “further” is misspelled.

Appropriate correction is required.

3. Claim 19 is objected to because of the following informalities: it is stated that sound is communicated “to the earpiece”, wherein it appears that sound is *passing through* the earpiece.

Appropriate correction is required.

4. Claim 32 is objected to because of the following informalities: the trademark “ALPHA PVC 319-40/45” is different from the trademark listed in the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to show and teach how the 70% quantity was ascertained.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 10, 19-20, 32-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. With respect to claim 10, it is not clear what biological information was used to compute the "men" statistical sampling space, i.e. geographical location, height, weight, ethnicity. And, how this information was distributed such that a quantity of 70 % of men's ears will be able to use the hearing aid.

8. With respect to claims 19-20, it is not clear whether the representation of the electrical conduit and the acoustic conduit should be the same or different.

9. With respect to claims 32-33, it is not clear what elements, formula, or characteristics constitutes the composition of the trademark (ALPHA PVC 3019-40/45) material listed. It is required that positive, exact, scientific terms be used to obviate uncertainty in the material used in trademarks [MPEP 608.01(v)].

10. Claim 33 recites the limitation "the crus of the helix" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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11. Claims 1-9, 14, 19-20, 28-30 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Langenbeck et al (U.S. Patent No. 1, 614, 987).

Regarding claim 1, Langenbeck teaches a device for facilitating hearing, the device comprising: an earpiece (figs. 1-4) configured to be captured at least partially within the conchae of an ear; and wherein the earpiece is configured for use in either ear (page 2, column 1, lines 5-19).

Regarding claim 2, Langenbeck teaches the earpiece comprises detents (figs. 1-4; two end points of bow 6) configured to be captured by the conchae as shown in figure 1.

Regarding claim 3, Langenbeck teaches the earpiece (figs. 1-4; two end points of bow 6) is configured to be captured by protrusions of the conchae as shown in figure 1.

Regarding claim 4, Langenbeck teaches the earpiece (figs. 1-4) is configured to be captured at least partially by the antihelix of the ear (page 1 column 2, line 94 through page 2 column 1 line 4).

Regarding claims 5-7, Langenbeck teaches the earpiece (figs. 1-4) is generally symmetric about a plane that bisects the earpiece between the top and bottom thereof.

Regarding claims 8-9, The device as recited in claim 1, wherein the earpiece is configured such that one size thereof fits a range of sizes of ears, including most adult ears (page 1 column 1 lines 18-26 and lines 44-56).

Regarding claim 14, Langenbeck teaches the device further comprising a boss (1) having a bore (2) formed there through, the boss being configured to extend at least partially into the ear canal as shown in figure 1.

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Regarding claim 19, Langenbeck teaches an acoustic conduit (2) for communicating sound to the earpiece.

Regarding claim 20, Langenbeck teaches a transducer (9; page 1 column 2 lines 77-94, wherein it is stated that a transducer or receiver body is proximate the earpiece) formed to the earpiece; and an electric conduit (2) for communicating a signal representative of sound to the transducer as shown in figure 2.

Regarding claims 28-30, Langenbeck teaches the earpiece (figs. 1-5) in claims 1-7 and 19-20 corresponding to the method of claims 28-30. The method is inherent in that it simply provides logical implementation of the structure found in Langenbeck.

Regarding claim 35, Langenbeck teaches an earpiece (figs. 1-4) comprising: a body that is configured for use in either ear (page 2, column 1, lines 5-19); and a acoustic coupler (2) having a bore formed therein, the acoustic coupler (2) being configured so as to facilitate attached of acoustic tubing to the earpiece (page 1 column 2 lines 77-94).

12. Claims 1-7, 11-15, 21-26, and 28-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Bakersville (US Publication No. 2005/0031146).

Regarding claims 1-3, Bakersville teaches a device (10) for facilitating hearing, the device comprising: an earpiece (12) configured to be captured at least partially within the conchae of an ear as shown in figure 1; and wherein the earpiece is configured for use in either ear by virtue of its construction being substantially similar to the present application.

Regarding claim 4, Bakersville teaches the earpiece (12) is configured to be captured at least partially by the antihelix of the ear as shown in figure 1.

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Regarding claims 5-7, Bakersville teaches the earpiece is generally symmetric about a plane that bisects the earpiece between the top and bottom thereof as shown in figure 1.

Regarding claim 11, Bakersville teaches the earpiece is comprised of at least one rib (near line depicted outer portion 27) as shown in figures 1-2.

Regarding claim 12, Bakersville teaches the earpiece is comprised of at least one generally arcuate rib and at least one generally vertical rib (near line depicted outer portion 27), the generally vertical rib extending between points proximate ends of the arcuate rib as shown in figures 1-2.

Regarding claim 13, Bakersville teaches the earpiece is comprised of two ribs that are generally configured to define a D as shown in figures 1-2.

Regarding claim 14, Bakersville teaches a boss (26) having a bore (30) formed there through, the boss being configured to extend at least partially into the ear canal.

Regarding claim 15, Bakersville teaches the earpiece is formed of a resilient polymer (page 2, paragraph 19, silicone material).

Regarding claim 21, Bakersville teaches a radio (page 1 paragraph 10); and a conduit (14) for transferring information from the radio to the earpiece.

Regarding claim 22, Bakersville teaches a radio (page 1 paragraph 10); an earpiece (12) configured to be captured at least partially within the conchae of an ear as shown in figure 1; a conduit (14, 22) configured to communicate information from the radio to the earpiece; and wherein the earpiece (12) is configured for use in either ear by virtue of its construction being substantially similar to the present application.

Regarding claim 23, Bakersville teaches the conduit (14) comprises acoustic tubing.

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Regarding claim 24, Bakersville teaches a transducer (16) disposed proximate the earpiece (12) and wherein the conduit comprises an electrically conductive conduit (22).

Regarding claims 25-26, see the rejection of claims 1 and 15.

Regarding claims 28-30, Bakersville teaches the earpiece (12) in claims 1-7 corresponding to the method of claims 28-30. The method is inherent in that it simply provides logical implementation of the structure found in Bakersville.

13. Claims 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Feldman (U.S. Patent No. 6,122,388).

Regarding claims 22-24, Feldman teaches a radio (col. 3 lines 12-15); an earpiece (fig. 5); a transducer (fig. 6); and a conduit (figs. 4-6) for transferring information from the radio to the earpiece.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 10, 16-18, 27, 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langenbeck or Bakersville.

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Regarding claim 10, neither Langenbeck nor Bakersville teach the earpiece is configured such that one size fits approximately 70% of the ears of men between 19 and 40 years old. However, it is known to make over-the-counter earpiece so one size hearing aid is able to fit enumerable hearing aid wearers, such as making a earpiece having a standard deviation of one which is approximately 70%. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the earpiece of Langenbeck or Bakerville in any configuration for over the counter use and fit enumerable hearing aid wearers, thereby reducing production costs.

Regarding claims 16-18, neither Langenbeck nor Bakersville teach the specifics of the composition of the earpiece. However, it is known and extremely common for earpieces to be formed of injection molded polymeric material have Shore [A-D] Hardness in durometers of between 30-50, for example to create the desired hardness and resiliency of the polymeric material as needed for the specific application, such as earpieces for comfort to the user, and cost efficiency. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an injection molded polymeric material in the construction of the earpiece of Langenbeck or Bakersville for the reasons stated above.

Regarding claim 27, see the rejection of claim 18 with respect to Bakerville.

Regarding claims 32-33, Langenbeck or Bakersville teach an earpiece configured to be captured within the conchae of an ear by at least an antitragus. Neither Langenbeck nor Bakersville teach the earpiece composed of ALPHA PVC 319-40/45 (specification listed as 3019-40/45). However, since the applicant states that the only requirement of the trademark ALPHA PVC 319-40/45 (specification listed as 3019-40/45) is to have a Shore A durometer of

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approximately 40 (specification page 5, paragraph 0028) and it is known and extremely common for earpieces to be formed of polymeric material having Shore [A-D] Hardness in durometers of between 30-50 for obtaining the desired hardness and resiliency of the polymeric material as needed for the specific application, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use polymeric material in the construction of the earpiece of Langenbeck or Bakersville for obtaining the desired hardness and resiliency and thus providing comfort to the user.

15. Claims 25-27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Langenbeck.

Regarding claims 25-27, Langenbeck teaches all of the limitations as presented in claim 25-27 (see claims 1-7 above), except the earpiece being formed of polymer. It is known and extremely common for earpieces to be formed of injection molded polymeric material for cost efficiency in production. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a polymeric material in the construction of the earpiece of Nielsen for the reason stated above.

Response to Arguments

16. Applicant's arguments with respect to claims 1-20 and 25-35 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phylesha L. Dabney whose telephone number is 571-272-7494. The examiner can normally be reached on Mondays, Tuesdays, Wednesdays, Fridays 8:30-4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 21, 2005



PLD



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SUPERVISORY PATENT EXAMINER